

Notice of Allowability**Application No.**

10/674,648

Examiner

MARIANNE L. PADGETT

Applicant(s)

CHOE ET AL.

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/16/2009.
2. ☒ The allowed claim(s) is/are 4-6,8-11,16-24,27-30,34,39 and 40.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 3/16/09.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Marianne L. Padgett/
Primary Examiner, Art Unit 1792

1. The following is an examiner's statement of **reasons for allowance**: applicants' After Final amendment & Remarks of 3/16/2009 have removed the outstanding issues, as the amendments to independent claim 40 correct the 112, first rejection issues with respect to enablement & written description as set forth in section 2 of the action mailed 1/16/2009, noting with respect to applicants' remarks bridging pages 6-7 of the 3/16/09 response, that the enablement & written description issues for each claim limitation discussed in the rejection, had the same root cause, thus were written up together & to adequately address the enablement requirement, also addressed the written description with respect to the claims.

With respect to the 112, second rejection in section 3 of the action mailed 1/16/2009, the meaning of the claim of "... a depth ranging from 250 nm to 1500 nm from a top surface..." can be considered clarified on the record, due to applicants' statements under the section concerning the interview summary on page 6 & the last paragraph on page 9 of the 3/16/09 response, which are considered to clarify the meaning on the record that the depth range of the implanted dopants starts with at least 250 nm as measured from the top surface and go no deeper than 1500 nm as measured from the top surface, where applicants' statements may be considered to provide file wrapper estoppel and thus remove possible ambiguous meanings. It is however noted that applicants' statement under their Interview Summary (page 6 of response): "It was agreed that the above range, which is recited in amended claim 40, positively and clearly recites one aspect of Applicants' invention", is literally incorrect, because (1) the examiner could not and would not agree that an amendment she has not yet seen, is clear; (2) what the examiner did agree to while related to what applicants alleged, was not the same thing, e.g. what the intended meaning was of applicants' depth ranging claim limitation as present in the claims of the 9/24/2008 amendment, was agreed to be intended as essentially as applicants have stated on the record, and it was agreed that applicants could clarify the record by appropriate statements thereon (see

examiner's interview summary), which they have now made, thus adequately correcting or clarifying this issue.

As applicants' amendments have removed the previous new matter rejections, their statements under 102(c)/103(c), in abbreviated form on page 6 & a full statement on page 11 of applicants' response, become effective, such that Bendernagel et al. (6,800,518) may no longer be properly considered prior art. Also in clarifying the relation of various steps in the claims, especially with respect to order in which they are performed, applicants' amendment removes the remaining teachings over Hodge et al. (5,387,541), in view of Hiromitsu et al. (JP 62-245620), as set forth in section 5 of the final rejection, by significantly differentiating therefrom & discussed in applicants' remarks.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. **Other art of interest** for relating to creation of porous layers, inclusive of doping using ion implantation & subsequent anodization, but which are not prior art include: de Sousa et al. (2008/0179712 A1) & Greene et al. (7,479,437 B2), which are also noted to also be lacking in the second ion implantings step as claimed.

4. **Any inquiry** concerning this communication or earlier communications from the examiner should be directed to **Marianne L. Padgett** whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 9:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 1792

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marianne L. Padgett/
Primary Examiner, Art Unit 1792

MLP/dictation software

3/22/2009